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January 25, 2007

ORIGINAL

Our File No. 21704-00100-60

Marlene H. Dortch, Secretary  
Federal Communications Commission  
c/o Natek, Inc.  
236 Massachusetts Avenue, NE, Suite 110  
Washington, DC 20002

FILED/ACCEPTED

JAN 25 2007

Federal Communications Commission  
Office of the Secretary

Reference MB Docket No. 87-268

Dear Madam Secretary:

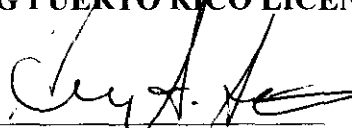
Submitted herewith are an original and four (4) copies of the Comments of CMCG Puerto Rico License, LLC in response to the *Seventh Further Notice of Proposed Rule Making* in the above-referenced matter.

Should you have any questions concerning CMCG's Comments, please contact the undersigned.

Respectfully submitted,

CMCG PUERTO RICO LICENSE, LLC

By:

  
Henry A. Solomon  
Its Attorney

Enclosure

0+4  
2007-01-25

Before the  
**FEDERAL COMMUNICATIONS COMMISSION**  
Washington, D.C. 20554

FILED/ACCEPTED

JAN 25 2007

Federal Communications Commission  
Office of the Secretary

In the Matter of: )

Advanced Television Systems )  
and Their Impact upon the )  
Existing Television Broadcast )  
Service )

MB Docket No. 87-268

To: The Commission

**COMMENTS OF CMCG PUERTO RICO LICENSE LLC**

CMCG Puerto Rico License LLC ("CMCGPR"), permittee of new broadcast television station WMEI(TV) ("WMEI"), Arecibo, Puerto Rico, by its attorneys, hereby responds to the Seventh Further Notice of Proposed Rule Making ("Seventh Further Notice")<sup>1</sup> in the above-referenced matter. CMCGPR respectfully requests that the Commission (1) rectify an inconsistency in the proposed DTV Table of Allotments ("DTV Table") that could potentially result in the loss of new Spanish-language DTV service to over 1.6 million residents of Puerto Rico,<sup>2</sup> and (2) permit WMEI to change its DTV construction certification from replication to maximization.

The current coordinates for WMEI's DTV channel allocation do not match the analog coordinates. There is a variation of more than 48 km. The coordinates of WMEI's DTV allotment in the proposed DTV Table should be changed to match the current WMEI NTSC

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<sup>1</sup> See Advanced Television Systems and Their Impact upon the Existing Television Broadcast Service, *Seventh Further Notice of Proposed Rule Making*, FCC 06-150 (Oct. 20, 2006).

<sup>2</sup> See Consolidated Engineering Statement, Communications Technologies, Inc. 1 (Aug. 2006) (attached hereto as Exhibit 1) (hereinafter "Consolidated Engineering Statement").

transmitter site. Otherwise, if CMCGPR is forced to construct WMEI's DTV facilities at the coordinates in the proposed DTV Table, not only will the cost of DTV construction greatly increase, but nearly half of the viewers encompassed in WMEI's analog contour will be unable to receive the WMEI DTV signal.

## **I. BACKGROUND**

WMEI is a new full-power television broadcast station that has brought much needed Spanish-language programming to the people of Puerto Rico. The station is authorized to operate on NTSC Channel 60, and on DTV Channel 14 post-transition. The proposed DTV Table lists the reference coordinates for WMEI's DTV allotment as N.L. 18-27-21, W.L. 66-52-59. These coordinates are at variance with WMEI's current NTSC transmitter site, as well as WMEI's transmitter site at the time the existing DTV Table was established. The correct coordinates are N.L. 18-9-17.10, W.L. 66-33-16.40.

On August 28, 2006, 41 days after it acquired WMEI, CMCGPR filed an application for a DTV construction permit ("Modification Application") specifying coordinates to correct this discrepancy in the existing DTV Table.<sup>3</sup> The Modification Application went on Public Notice on August 31, 2006.<sup>4</sup> The time for interested parties to file Petitions to Deny has passed and no such petitions or informal objections have been filed. The Modification Application is unopposed, and is currently listed in CDBS as "Accepted for Filing." CMCGPR hoped that the Modification Application would highlight the error in the existing DTV Table and provide the opportunity to correct this inaccuracy before the release of the proposed final DTV

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<sup>3</sup> In the Modification Application, CMCGPR requested a temporary waiver of 47 C.F.R. § 73.622 ("Request for Waiver"), a section of the Commission's rules that would have otherwise prohibited the filing of a DTV construction application at WMEI's current NTSC coordinates. A copy of the Request for Wavier is attached hereto as Exhibit 2.

<sup>4</sup> Broadcast Applications, Public Notice, Report Number 26311 (August 31, 2006).

Table. While the FCC's electronic database now makes reference to the correct DTV coordinates, the proposed DTV Table still relies on the incorrect coordinates from the previous DTV Table.

**II. THE CURRENT COORDINATES FOR WMEI'S PROPOSED DTV ALLOTMENT SHOULD BE CHANGED TO PERMIT REPLICATION.**

In creating the existing DTV Table, the Commission sought to "enable stations to 'replicate' the service area of their existing NTSC operations," in order to "provide DTV service to an area that is comparable to [each station's] existing NTSC service area."<sup>5</sup> In crafting the proposed DTV Table, it has been the Commission's continuing goal to promote "spectrum efficiency and ensure the best possible DTV service to the public."<sup>6</sup> As it stands, the proposed DTV allotment for WMEI falls well short of serving any of these goals.

Paragraph 26 of the Seventh Further Notice provides that licensees who are unable to construct their full, authorized DTV facilities may "submit a technical showing that a modification of the licensee's pre-freeze authorized DTV facility – *such as a change in transmitter site* or an increase in power – would permit construction of their full, authorized DTV facilities with their present TCD or a substitute channel." WMEI's situation is similar. From its allotted DTV transmitter site, WMEI simply cannot replicate its existing NTSC service area, which currently encompasses approximately 3.45 million viewers. The current DTV allotment contour will serve approximately 1.75 million people, while the facility proposed in the Modification Application will serve roughly 3.35 million viewers.<sup>7</sup> Unless the correction to

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<sup>5</sup> Seventh Further Notice, *supra* note 1, at 3-4.

<sup>6</sup> *Id.* at 7.

<sup>7</sup> See Consolidated Engineering Statement, *supra* note 2. When adjusted for actual interference, the allotted DTV facility will serve approximately 1.15 million viewers, while the facility proposed by CMCGPR will serve

the DTV allotment coordinates for WMEI is made, 1.6 million residents of Puerto Rico will lose WMEI's over-the-air signal. This is neither an efficient use of spectrum, nor "the best possible DTV service" for the people of Puerto Rico.

An engineering analysis, prepared by Communications Technologies, Inc., is attached hereto. The analysis indicates that changing the coordinates in the proposed DTV Table to align them with WMEI's current NTSC transmitter site will cause no known interference issues. Furthermore, changing the coordinates will remove a short spacing with WTIN-DT.<sup>8</sup> Therefore, the FCC has the opportunity to rectify a problem affecting 1.6 million Puerto Rican viewers, without harming any other licensee, permittee or applicant.

### **III. DTV MAXIMIZATION AT WMEI'S CURRENT NTSC COORDINATES WOULD SERVE THE PUBLIC INTEREST.**

Paragraph 12 of the Seventh Further Notice permits licensees who failed to timely file the FCC Form 381 election to "propos[e] a change to their certification to specify maximized facilities for which they would have been allowed to certify" at the November 5, 2004 deadline (the "Deadline").<sup>9</sup> The previous licensee of WMEI was precluded from filing an FCC Form 381 by the Deadline, and WMEI was assigned replication facilities. In light of the change in ownership and the circumstances described above, WMEI should now be permitted to change its certification and construct maximized facilities at its NTSC coordinates, in order to provide the highest level of service to the people of Puerto Rico.

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approximately 3 million viewers. While the proposed facility will not completely replicate the existing NTSC facility, it will provide 1.85 million more viewers the opportunity to receive WMEI over the air.

<sup>8</sup> The allotted DTV site for WMEI is 45.3 km from the WTIN-DT site, compared to 2.9 km for the WMEI NTSC transmitter site. Engineering Statement, Communications Technologies, Inc. 2 (Dec. 2006) (attached hereto as Exhibit 3) (hereinafter "Engineering Statement").

<sup>9</sup> Seventh Further Notice, *supra* note 1, at 12.

WMEI's construction permit lapsed on December 21, 2000 and was not reinstated until May 18, 2005 when the Commission granted an Application for Review of a decision denying a request for tolling of the construction deadline.<sup>10</sup> As a result, WMEI's previous licensee had no authority to make the required certification at the Deadline. The public interest is best served by allowing WMEI to take advantage of the opportunity it was denied by the erroneous refusal to extend the construction deadline to account for time lost due to an Act of God.

The current DTV allotment for WMEI specifies an ERP of 50kW at coordinates far removed from WMEI's current NTSC coordinates, with 12.6% received interference.<sup>11</sup> This facility will serve approximately 1.15 million people, adjusted for actual interference.<sup>12</sup> CMCGPR seeks authority to construct a maximized facility of 350kW ERP from its NTSC coordinates, with 1.44% received interference and no new interference to existing DTV allotments.<sup>13</sup> The proposed facility will serve approximately 3.53 million people, and cover nearly all of Puerto Rico.<sup>14</sup> This represents a staggering gain of approximately 2.38 million viewers over the DTV allotment facility, and approximately 500 thousand viewers over the DTV facility proposed in the Modification Application (discussed above).

The facility currently proposed by CMCGPR in the Modification Application, while closely replicating WMEI's current NTSC contour, still deprives at least 100 thousand

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<sup>10</sup> The WMEI construction permit expired on December 21, 2000. The previous licensee requested tolling of the construction deadline to account for construction time lost due to damage caused by hurricane. The request was originally denied, but subsequently granted on reconsideration and review on May 18, 2005.

<sup>11</sup> Engineering Statement, *supra* note 8.

<sup>12</sup> *Id.*

<sup>13</sup> *Id.*

<sup>14</sup> *Id.*

viewers of the opportunity to continue to receive WMEI over the air post transition. This loss is unacceptable. Only by allowing WMEI to maximize from its current NTSC coordinates can the FCC ensure that those who currently receive WMEI over the air will continue to, while at the same time bring new digital broadcast service to hundreds of thousands of new viewers.<sup>15</sup>

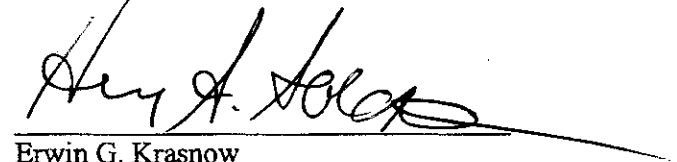
#### IV. CONCLUSION

For the reasons set forth above, the Commission should (1) amend the proposed DTV Table to reflect the coordinates of WMEI's NTSC transmitter site (N.L. 18-9-17.10, W.L. 66-33-16.40), and grant CMCGPR's pending Modification Application for WMEI; and (2) permit WMEI to change its certification to maximization, enabling it to provide service to the largest possible broadcast area.

Respectfully submitted,

**CMCG PUERTO RICO LICENSE LLC**

By:



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Garvey Schubert Barer  
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(202) 298-2161  
Its Attorneys

January 25, 2007

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<sup>15</sup> If the Commission permits CMCGPR to maximize at WMEI's NTSC coordinates, CMCGPR will promptly amend the pending application for a DTV construction permit to reflect such a grant.

# ***EXHIBIT 1***

**CONSOLIDATED ENGINEERING STATEMENT**  
**PREPARED IN SUPPORT OF APPLICATION FOR**  
**DTV CONSTRUCTION PERMIT**  
**TV STATION WMEI FCC ID 26676**  
**CHANNEL 14 470-476 MHz 10 kW MAX DA @ 833 m HAAT**  
**ARECIBO, PUERTO RICO**

**AUGUST 2006**

**CONSOLIDATED ENGINEERING STATEMENT  
PREPARED IN SUPPORT OF APPLICATION FOR  
DTV CONSTRUCTION PERMIT  
TV STATION WMEI FCC ID 26676  
CHANNEL 14 470-476 MHz 10 kW MAX DA @ 833 m HAAT**

**ARECIBO, PUERTO RICO**

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- I. Technical specifications for proposed WMEI Channel 14 DTV facility.
- II. HAAT, depression angle to the radio horizon and relative field pattern data.
- III. Allocation Study.

**FIGURES:**

1. Vertical Plan Sketch.
2. Horizontal plane radiation pattern.
3. Elevation pattern.
4. Normalized horizontal plane radiation pattern calculated by taking into account beam tilt at the horizon.
5. Predicted 48 and 41 dBu F(50,90) contours.
6. WMEI CP 64 dBu F(50,50) and proposed 41 dBu F(50,90) contour comparison.
7. WMEI allotment and CP replication 41 dBu contour comparison.

**CONSOLIDATED ENGINEERING STATEMENT  
PREPARED IN SUPPORT OF APPLICATION FOR  
DTV CONSTRUCTION PERMIT  
TV STATION WMEI FCC ID 26676  
CHANNEL 14 470-476 MHz 10 kW MAX DA @ 833 m HAAT**

**ARECIBO, PUERTO RICO**

**AUGUST 2006**

**SUMMARY**

The following engineering statement has been prepared on behalf of **CMCG Puerto Rico License, LLC**, permittee of WMEI Channel 60 analog television and tentative digital channel electee for Channel 14. The purpose of this application is to specify digital facilities which replicate the WMEI authorized Channel 60 analog facilities. All required technical data is found in this statement and on *FCC Form 301, Section III-C*, which this statement accompanies.

The proposed digital facilities requested herein will not exceed the WMEI authorized analog service area in any direction beyond the area resulting from the station's parameters as defined in the station's outstanding construction permit. It should be noted that the proposal advanced in this modification application is in the public interest as it will allow WMEI to bring a new full service DTV signal to Puerto Rico reaching the same area which the analog facility is designed to serve. It is requested that the Commission expeditiously process and grant this application for construction permit so that WMEI can be assured of duplicating its analog service area at the DTV transition. Currently, the WMEI CP 64 dBu analog contour encompasses 3,450,749 persons while the current allotment contour reaches 1,750,312 persons resulting in a 1,700,437 person loss in service should the Channel 14 allotment remain as currently proposed by the Commission.

**PROPOSED ANTENNA SYSTEM**

At the transition, WMEI plans to use the Channel 60 SWR SWDDPD 8-0-2-8 panel antenna. The current top mounted mast and tower combination have a total height of 134.1 meters AGL as specified in registration number 1011019 and will remain unchanged. *Figure 1*, attached, is a vertical plan sketch for the proposed top mounted antenna system on the existing tower.

Figure 2, attached, includes the manufacturer plotted horizontal plane pattern and tabulation for the proposed SWR, horizontally polarized, directional antenna system. The antenna will incorporate 1.5° of electrical beam tilt in the major lobe. The manufacturer plotted and tabulated elevation pattern data are found on Figure 3, attached. Figure 4 is the normalized horizontal plane pattern employed for distance to contour calculations. Table I is a summary of the proposed facility technical characteristics.

#### **PREDICTED CONTOUR LOCATIONS**

Figure 5, attached, depicts the 48 and 41 dBu F(50,90) service contours. This map Figure is based on 72 evenly spaced radials with terrain data from the NGDC 3 second terrain data base - RadioSoft. Table II, attached, is a tabulation of the horizontal plane pattern, calculated depression angle for each radial based on the HAAT for that radial and elevation pattern relative field. In all cases where the elevation pattern relative field value F was 0.9 or greater, an elevation pattern relative field value of 1.0 was used in determining ERP and distance to contours in compliance with 73.684(c)(2). The predicted 48 dBu contour covers 100% of the community of Arecibo, Puerto Rico.

#### **DTV REPLICATION**

Figure 6 depicts the authorized 64 dBu F(50,50) and proposed 41 dBu F(50,90) contours. The proposed DTV facility achieves replication to the extent possible without exceeding the authorized analog contours. Figure 7 depicts the allotment and proposed 41 dBu F(50,90) contours. It is seen that the allotment does not achieve replication and population as the allotment contour is only 50.7% of the population in the NTSC 64 dBu contour.

#### **COORDINATION**

The WMEI proposed transmitter site is 2,959 km from the nearest point on the Canadian border and 3,260 km from the nearest point on the Mexican border. The site is located 48 km from the Saban Seca, Puerto Rico FCC monitoring station and 36.6 km from the Arecibo observatory.

The WMEI facility will operate in the 470-476 MHz TV band, TV Channel 14. This frequency is well

outside the 608-614 MHz band for which emissions are regulated by ITU and FCC Rules. WMEI has coordinated this application with the observatory via e-mail with PDF attachment at [prcz@naic.edu](mailto:prcz@naic.edu).

In accordance with *FCC Rule Section 73.1030(c)(3)(iv)*, the Chief of the Compliance and Information Bureau of the FCC has been mailed a copy of the technical specifications for the proposed facility.

Since the current site has been approved for 1,000 kW ERP it is not anticipated that there will be any deleterious impact to the Radio Observatory or the FCC monitoring station from the same site with lesser ERP.

There are no known AM stations within 10 km of the WMEI site proposed herein. Listed below are all known authorized full service FM and TV stations within 16 km of the proposed site.

<u>Call</u>	<u>Channel</u>	<u>Community</u>	<u>Distance - Kilometers</u>
WZAR	CH 270B	Ponce, PR	0.08
WPUC	CH 205B	Ponce, PR	4.53
WNRT	CH 245B	Manati, PR	11.92
WSTE	CH 7	Ponce, PR	0.01
WSUR-DT	CH 43	Ponce, PR	2.83
WSUR-TV	CH 9	Ponce, PR	2.83
WIRS-DT	CH 41	Yauco, PR	2.85
WIRS-TV	CH 42	Yauco, PR	2.85
WTIN-DT	CH 15	Ponce, PR	2.85
WTIN-TV	CH 14	Ponce, PR	2.92
WSTE-DT	CH 8	Ponce, PR	15.87
WSTE-TV	CH 8	Ponce, PR	15.87

No adverse impact is anticipated with the facilities located herein. WMEI will employ good engineering standards in its installation, including filtering as necessary, and will correct any problems that should occur as the last facility constructing.

#### **RF RADIATION ANALYSIS**

The proposed antenna system consists of a SWR Model SWDDPD 8-0-2-8, horizontally polarized, panel antenna, with a radiation center 128.3 meters above ground. Utilizing formula 10 of *OET Bulletin No. 65*,

*Edition 97-01*, a value F of 0.15 has been used to calculate the power density 2 meters above ground. The maximum power density is 0.471 uW/cm squared for an ERP of 10,000 watts. This value is 0.15% of the allowable 315.3 uW/cm squared power density for uncontrolled environments for TV Channel 14 and, thus, is believed to be categorically excluded from environmental processing.

The tower base will be fenced to prevent unauthorized access.

The applicant will reduce, or cease, transmission as required to meet *FCC OET-65* guidelines for worker exposure.

### **CONCLUSION**

The foregoing was prepared on behalf of **CMCG Puerto Rico License, LLC** by Clarence M. Beverage of *Communications Technologies, Inc.*, Marlton, New Jersey, whose qualifications are a matter of record with the Federal Communications Commission. The undersigned certifies, under penalty of perjury, that the statements herein are true and correct of his own knowledge, except such statements made on information and belief, and as to these statements he believes them to be true and correct.

By \_\_\_\_\_

**Clarence M. Beverage**  
for Communications Technologies, Inc.  
Marlton, New Jersey  
August 1, 2006

**TABLE I**

**TECHNICAL SPECIFICATIONS  
WMEI PROPOSED MODIFICATION TO CONSTRUCTION PERMIT  
CHANNEL 14 10 kW MAX DA @ 833 m HAAT**

NAD 27		NAD 83	
Latitude:	18° 09' 17.1"	Latitude:	18° 09' 10.00"
Longitude:	66° 33' 16.4"	Longitude:	66° 33' 15"
FCC Tower Registration:	#1011019		
Ground Elevation:	1200 meters AMSL		
Tower & all appurtenances:	134.1 meters AGL		
Top of tower:	121.9 meters AGL		
Antenna radiation center:	128.3 m AGL	1,328.3 m AMSL	
ERP maximum:	10 kW @ 0.75° depression angle, 7.073 kW @ Radio Horizon		
Frequency:	470-476 MHz		

<u>Azimuth</u>	<u>* AAT</u>	<u>HAAT</u>	<u>Distance km 64 dBu F(50,50)</u>	<u>Distance km 41 dBu F(50,90)</u>
0	587	741	86.1	79.0
45	658	670	81.9	76.0
90	608	720	52.6	52.4
135	302	1026	63.7	62.0
180	206	1122	68.9	66.3
225	322	1006	82.3	76.5
270	775	553	82.3	76.2
315	506	822	85.6	78.7
# 334	<u>624</u>	<u>704</u>	<u>83.7</u>	<u>77.4</u>
	Avg.	495.5	832.8	

\* NGDC 3 second terrain data - RadioSoft

# Radial through community of license. Not included in average of 8 radials.

**TABLE II**  
**WMEI NORMALIZED HORIZONTAL PLANE PATTERN CALCULATIONS**  
**APRIL 2006**

Bearing	HAAT	Depression Angle	Elevation Relative Field	Azimuth relative field	Elevation X Azimuth	Normalized Relative Field	ERP kW
0	741	0.75403	0.881	0.7843	0.690968	0.821603	477.5
10	661	0.71216	0.841	0.9005	0.757321	0.9005	573.5
20	677	0.72073	0.841	0.9538	0.802146	0.9538	643.5
30	730	0.74841	0.841	0.9144	0.76901	0.9144	591.4
40	704	0.73496	0.841	0.8201	0.689704	0.8201	475.7
50	648	0.70513	0.841	0.6928	0.582645	0.6928	339.5
60	525	0.63469	0.805	0.5528	0.445004	0.529137	198.0
70	514	0.62800	0.805	0.3952	0.318136	0.378283	101.2
80	493	0.61504	0.805	0.2321	0.186841	0.222165	34.9
90	720	0.74327	0.841	0.1213	0.102013	0.1213	10.4
100	898	0.83008	0.881	0.1073	0.094531	0.112403	8.9
110	936	0.84746	0.881	0.0816	0.07189	0.085481	5.2
120	1015	0.88250	0.888	0.0452	0.040138	0.047726	1.6
130	978	0.86626	0.888	0.104	0.092352	0.109812	8.5
140	1089	0.91410	0.888	0.221	0.196248	0.233351	38.5
150	1136	0.93362	0.888	0.2957	0.262582	0.312225	69.0
160	1147	0.93813	0.888	0.2996	0.266045	0.316343	70.8
170	1165	0.94546	0.888	0.2548	0.226262	0.26904	51.2
180	1122	0.92785	0.888	0.1997	0.177334	0.21086	31.4
190	1129	0.93074	0.888	0.1958	0.17387	0.206742	30.2
200	1141	0.93567	0.888	0.2545	0.225996	0.268723	51.1
210	1075	0.90821	0.888	0.336	0.298368	0.354778	89.0
220	1026	0.88727	0.888	0.4359	0.387079	0.460261	149.8
230	977	0.86582	0.888	0.4656	0.413453	0.49162	170.9
240	893	0.82776	0.881	0.552	0.486312	0.578254	236.5
250	761	0.76414	0.881	0.7472	0.658283	0.782739	433.3
260	667	0.71539	0.841	0.8993	0.756311	0.8993	572.0
270	553	0.65139	0.841	0.9867	0.829815	0.9867	688.6
275			0.841	1	0.841	1	707.3
280	578	0.66595	0.841	0.9738	0.818966	0.9738	670.7
290	584	0.66940	0.841	0.873	0.734193	0.873	539.1
300	694	0.72973	0.841	0.7399	0.622256	0.7399	387.2
310	810	0.78836	0.881	0.6155	0.542256	0.644775	294.0
320	813	0.78981	0.881	0.743	0.654583	0.778339	428.5
330	651	0.70676	0.841	0.8329	0.700469	0.8329	490.7
340	710	0.73809	0.841	0.7017	0.59013	0.7017	348.3
350	722	0.74430	0.841	0.6664	0.560442	0.6664	314.1

TABLE III

## TV INTERFERENCE and SPACING ANALYSIS PROGRAM

Date: 08-01-2006 Time: 17:18:20

Record Selected for Analysis

WMEI USERRECORD-01 ARECIBO PR US  
 Channel 14 ERP 10. kW HAAT 839. m RCAMSL 01328 m  
 Latitude 018-09-17 Longitude 0066-33-16  
 Status APP Zone 2 Border  
 Dir Antenna Make usr Model USRPAT01 Beam tilt N Ref Azimuth 0.  
 Last update Cutoff date Docket  
 Comments  
 Applicant

Cell Size for Service Analysis 2.0 km/side

Distance Increments for Longley-Rice Analysis 1.00 km

Facility meets maximum height/power limits

Azimuth (Deg)	ERP (kW)	HAAT (m)	41.0 dBu F(50,90) (km)
0.0	6.711	703.5	80.9
45.0	5.715	659.5	78.5
90.0	0.136	762.2	55.0
135.0	0.256	1048.1	63.8
180.0	0.383	1128.7	68.0
225.0	2.084	1021.2	79.0
270.0	9.722	585.0	80.2
315.0	4.922	800.2	80.8

Evaluation toward Class A Stations

No Spacing violations or contour overlap to Class A stations

Class A Evaluation Complete

## SPACING VIOLATION FOUND BETWEEN STATION

WMEI 14 ARECIBO

PR USERRECORD01

and station

SHORT TO: WOST 16 MAYAGUEZ PR BPCT 19920102KE  
 018-18-51 0067-11-24  
 Req. separation => 24.1 <= 96.6 Actual separation 69.5 Short 27.1( 45.4) km

SHORT TO: WTCV 18 SAN JUAN PR BLCT 19840808KN  
 018-18-36 0065-47-41  
 Req. separation => 24.1 <= 96.6 Actual separation 82.2 Short 14.4( 58.1) km

SHORT TO: WNJX-TV 22 MAYAGUEZ PR BLCT 20030307ADG  
 018-09- 0 0066-59- 0  
 Req. separation => 24.1 <= 96.6 Actual separation 45.4 Short 51.2( 21.3) km

SHORT TO: WNJX-TV 22 MAYAGUEZ PR BPCT 20030306ABR  
 018-09- 0 0066-59- 0  
 Req. separation => 24.1 <= 96.6 Actual separation 45.4 Short 51.2( 21.3) km

## LANDMOBILE SPACING VIOLATIONS FOUND

NONE

Proposed facility OK to FCC Monitoring Stations

Proposed facility OK toward West Virginia quite zone

Proposed facility OK toward Table Mountain

Proposed facility is beyond the Canadian coordination distance

Proposed facility is beyond the Mexican coordination distance

Proposed station is OK toward AM broadcast stations

\*\*\*\*\*

## Start of Interference Analysis

Channel	Call	Proposed Station City/State	ARN
14	WMEI	ARECIBO PR	USERRECORD01

## Stations Potentially Affected by Proposed Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
15	WTIN	PONCE PR	2.9	CP MOD	BMPCDT	-20040803ABE
15	WTIN-DT	PONCE PR	2.9	PLN	DTVPLN	-DTVP0189
15	WSJN-CA	SAN JUAN PR	43.9	LIC	BLTTL	-19940223IC
15	WVIF	CHRISTIANSTED VI	190.8	LIC	BLCT	-20001227ABK
16	WOST	MAYAGUEZ PR	69.4	CP	BPCT	-19920102KE
18	WTCV	SAN JUAN PR	82.0	LIC	BLCT	-19840808KN
22	WNJX-TV	MAYAGUEZ PR	45.3	LIC	BLCT	-20030307ADG
22	WNJX-TV	MAYAGUEZ PR	45.3	CP MOD	BPCT	-20030306ABR

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## Analysis of Interference to Affected Station 1

## DTV Baseline Analysis

| Channel | Call    | City/State | Application | Ref. No.  |
|---------|---------|------------|-------------|-----------|
| 15      | WTIN-DT | PONCE PR   | DTVPLN      | -DTVP0189 |

## Stations Potentially Affecting This Station

| Chan | Call    | City/State       | Dist(km) | Status | Application | Ref. No.  |
|------|---------|------------------|----------|--------|-------------|-----------|
| 14   | WTIN    | PONCE PR         | 0.0      | PLN    | DTVPLN      | -NPLN0900 |
| 15   | NEW     | CHRISTIANSTED VI | 193.6    | PLN    | DTVPLN      | -NPLN0940 |
| 16   | WMTJ-DT | FAJARDO PR       | 84.1     | PLN    | DTVPLN      | -DTVP0239 |
| 16   | WTRA    | MAYAGUEZ PR      | 65.6     | PLN    | DTVPLN      | -NPLN0965 |

Results for: 15A PR PONCE      DTVPLN      DTVP0189      PLN

HAAT 861.0 m, ATV ERP 50.0 kW

|                                | POPULATION | AREA (sq km) |
|--------------------------------|------------|--------------|
| within Noise Limited Contour   | 3735741    | 34733.4      |
| not affected by terrain losses | 3459968    | 33800.4      |
| lost to NTSC IX                | 74683      | 484.5        |
| lost to additional IX by ATV   | 63031      | 116.1        |
| lost to ATV IX only            | 87401      | 224.2        |
| lost to all IX                 | 137714     | 600.6        |

## NTSC Baseline Analysis

|         |      |            |             |           |
|---------|------|------------|-------------|-----------|
| Channel | Call | City/State | Application | Ref. No.  |
| 14      | WTIN | PONCE PR   | DTVPLN      | -NPLN0900 |

## Stations Potentially Affecting This Station

| Chan | Call    | City/State       | Dist(km) | Status | Application | Ref. No.  |
|------|---------|------------------|----------|--------|-------------|-----------|
| 15   | WTIN-DT | PONCE PR         | 0.0      | PLN    | DTVPLN      | -DTVP0189 |
| 15   | NEW     | CHRISTIANSTED VI | 193.6    | PLN    | DTVPLN      | -NPLN0940 |
| 16   | WMTJ-DT | FAJARDO PR       | 84.1     | PLN    | DTVPLN      | -DTVP0239 |
| 16   | WTRA    | MAYAGUEZ PR      | 65.6     | PLN    | DTVPLN      | -NPLN0965 |
| 17   | WVEO-DT | AGUADILLA PR     | 65.6     | PLN    | DTVPLN      | -DTVP0278 |
| 18   | WSJU    | SAN JUAN PR      | 84.1     | PLN    | DTVPLN      | -NPLN1029 |
| 21   | WSJN-DT | SAN JUAN PR      | 77.3     | PLN    | DTVPLN      | -DTVP0454 |
| 22   | WNJXTV  | MAYAGUEZ PR      | 43.5     | PLN    | DTVPLN      | -NPLN1155 |
| 28   | WKAQ-DT | SAN JUAN PR      | 55.7     | PLN    | DTVPLN      | -DTVP0724 |
| 29   | WORA-DT | MAYAGUEZ PR      | 43.6     | PLN    | DTVPLN      | -DTVP0763 |

|                                |  |            |              |     |
|--------------------------------|--|------------|--------------|-----|
| Results for: 14N PR PONCE      |  | DTVPLN     | NPLN0900     | PLN |
|                                |  | POPULATION | AREA (sq km) |     |
| within Noise Limited Contour   |  | 3735741    | 34733.4      |     |
| not affected by terrain losses |  | 3284959    | 33011.6      |     |
| lost to NTSC IX                |  | 107975     | 376.4        |     |
| lost to additional IX by ATV   |  | 110029     | 400.4        |     |
| lost to all IX                 |  | 218004     | 776.8        |     |

## Analysis of current record

|         |      |            |             |              |
|---------|------|------------|-------------|--------------|
| Channel | Call | City/State | Application | Ref. No.     |
| 15      | WTIN | PONCE PR   | BMPCDT      | -20040803ABE |

## Stations Potentially Affecting This Station

| Chan | Call    | City/State       | Dist(km) | Status | Application   | Ref. No.     |
|------|---------|------------------|----------|--------|---------------|--------------|
| 15   | WVIF    | CHRISTIANSTED VI | 193.5    | LIC    | BLCT          | -20001227ABK |
| 16   | WMTJ    | FAJARDO PR       | 84.0     | CP MOD | BMPEDT        | -20030324ACY |
| 16   | WMTJ-DT | FAJARDO PR       | 84.0     | PLN    | DTVPLN        | -DTVP0239    |
| 16   | WOST    | MAYAGUEZ PR      | 66.7     | CP     | BPCT          | -19920102KE  |
| 14   | WMEI    | ARECIBO PR       | 2.9      | APP    | USERRECORD-01 |              |

Total scenarios = 2

Result key: 1  
 Scenario 1 Affected station 1  
 Before Analysis

Results for: 15A PR PONCE BMPCDT 20040803ABE CP

HAAT 839.0 m, ATV ERP 380.2 kW

|                                | POPULATION | AREA (sq km) |
|--------------------------------|------------|--------------|
| within Noise Limited Contour   | 3797251    | 43122.5      |
| not affected by terrain losses | 3580275    | 42477.8      |
| lost to NTSC IX                | 56446      | 700.8        |
| lost to additional IX by ATV   | 116925     | 196.2        |
| lost to ATV IX only            | 145559     | 572.6        |
| lost to all IX                 | 173371     | 897.0        |

Potential Interfering Stations Included in above Scenario 1

|                      |        |             |     |
|----------------------|--------|-------------|-----|
| 15N VI CHRISTIANSTED | BLCT   | 20001227ABK | LIC |
| 16N PR MAYAGUEZ      | BPCT   | 19920102KE  | CP  |
| 16A PR FAJARDO       | BMPEDT | 20030324ACY | CP  |

After Analysis

Results for: 15A PR PONCE BMPCDT 20040803ABE CP

HAAT 839.0 m, ATV ERP 380.2 kW

|                                | POPULATION | AREA (sq km) |
|--------------------------------|------------|--------------|
| within Noise Limited Contour   | 3797251    | 43122.5      |
| not affected by terrain losses | 3580275    | 42477.8      |
| lost to NTSC IX                | 56446      | 700.8        |
| lost to additional IX by ATV   | 121299     | 208.2        |
| lost to ATV IX only            | 150274     | 588.6        |
| lost to all IX                 | 177745     | 909.0        |

Potential Interfering Stations Included in above Scenario 1

|                                         |              |             |             |
|-----------------------------------------|--------------|-------------|-------------|
| 15N VI CHRISTIANSTED                    | BLCT         | 20001227ABK | LIC         |
| 16N PR MAYAGUEZ                         | BPCT         | 19920102KE  | CP          |
| 16A PR FAJARDO                          | BMPEDT       | 20030324ACY | CP          |
| 14A PR ARECIBO                          | USERRECORD01 |             | APP         |
| *Percent Service lost without proposal: | -2.5         | to BMPCDT   | 20040803ABE |
| *Percent Service lost with proposal:    | -2.4         | to BMPCDT   | 20040803ABE |

Result key: 2  
 Scenario 2 Affected station 1  
 Before Analysis

Results for: 15A PR PONCE BMPCDT 20040803ABE CP

HAAT 839.0 m, ATV ERP 380.2 kW

|                                | POPULATION | AREA (sq km) |
|--------------------------------|------------|--------------|
| within Noise Limited Contour   | 3797251    | 43122.5      |
| not affected by terrain losses | 3580275    | 42477.8      |
| lost to NTSC IX                | 56446      | 700.8        |
| lost to additional IX by ATV   | 80555      | 144.2        |
| lost to ATV IX only            | 105843     | 248.3        |
| lost to all IX                 | 137001     | 844.9        |

Potential Interfering Stations Included in above Scenario 2

|                      |        |             |     |
|----------------------|--------|-------------|-----|
| 15N VI CHRISTIANSTED | BLCT   | 20001227ABK | LIC |
| 16N PR MAYAGUEZ      | BPCT   | 19920102KE  | CP  |
| 16A PR FAJARDO       | DTVPLN | DTVP0239    | PLN |

After Analysis

Results for: 15A PR PONCE BMPCDT 20040803ABE CP

HAAT 839.0 m, ATV ERP 380.2 kW

|                                | POPULATION | AREA (sq km) |
|--------------------------------|------------|--------------|
| within Noise Limited Contour   | 3797251    | 43122.5      |
| not affected by terrain losses | 3580275    | 42477.8      |
| lost to NTSC IX                | 56446      | 700.8        |
| lost to additional IX by ATV   | 84929      | 156.2        |
| lost to ATV IX only            | 110558     | 264.3        |
| lost to all IX                 | 141375     | 856.9        |

Potential Interfering Stations Included in above Scenario 2

|                      |              |             |     |
|----------------------|--------------|-------------|-----|
| 15N VI CHRISTIANSTED | BLCT         | 20001227ABK | LIC |
| 16N PR MAYAGUEZ      | BPCT         | 19920102KE  | CP  |
| 16A PR FAJARDO       | DTVPLN       | DTVP0239    | PLN |
| 14A PR ARECIBO       | USERRECORD01 |             | APP |

|                                         |      |           |             |
|-----------------------------------------|------|-----------|-------------|
| *Percent Service lost without proposal: | -3.6 | to BMPCDT | 20040803ABE |
| *Percent Service lost with proposal:    | -3.5 | to BMPCDT | 20040803ABE |

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## Analysis of Interference to Affected Station 2

## Analysis of current record

|         |         |            |             |           |
|---------|---------|------------|-------------|-----------|
| Channel | Call    | City/State | Application | Ref. No.  |
| 15      | WTIN-DT | PONCE PR   | DTVPLN      | -DTVP0189 |

## Stations Potentially Affecting This Station

| Chan | Call    | City/State       | Dist(km) | Status | Application   | Ref. No.     |
|------|---------|------------------|----------|--------|---------------|--------------|
| 15   | WVIF    | CHRISTIANSTED VI | 193.6    | LIC    | BLCT          | -20001227ABK |
| 16   | WMTJ    | FAJARDO PR       | 84.1     | CP MOD | BMPEDT        | -20030324ACY |
| 16   | WMTJ-DT | FAJARDO PR       | 84.1     | PLN    | DTVPLN        | -DTVP0239    |
| 16   | WOST    | MAYAGUEZ PR      | 66.6     | CP     | BPCT          | -19920102KE  |
| 14   | WMEI    | ARECIBO PR       | 2.9      | APP    | USERRECORD-01 |              |

Total scenarios = 2

Result key: 3  
 Scenario 1 Affected station 2  
 Before Analysis

Results for: 15A PR PONCE DTVPLN DTVP0189 PLN  
 HAAT 861.0 m, ATV ERP 50.0 kW

|                                | POPULATION | AREA (sq km) |
|--------------------------------|------------|--------------|
| within Noise Limited Contour   | 3735741    | 34733.4      |
| not affected by terrain losses | 3459968    | 33800.4      |
| lost to NTSC IX                | 54465      | 460.5        |
| lost to additional IX by ATV   | 68666      | 140.2        |
| lost to ATV IX only            | 98791      | 428.5        |
| lost to all IX                 | 123131     | 600.6        |

## Potential Interfering Stations Included in above Scenario 1

|                      |        |             |     |
|----------------------|--------|-------------|-----|
| 15N VI CHRISTIANSTED | BLCT   | 20001227ABK | LIC |
| 16N PR MAYAGUEZ      | BPCT   | 19920102KE  | CP  |
| 16A PR FAJARDO       | BMPEDT | 20030324ACY | CP  |

## After Analysis

Results for: 15A PR PONCE DTVPLN DTVP0189 PLN  
 HAAT 861.0 m, ATV ERP 50.0 kW

|                                | POPULATION | AREA (sq km) |
|--------------------------------|------------|--------------|
| within Noise Limited Contour   | 3735741    | 34733.4      |
| not affected by terrain losses | 3459968    | 33800.4      |
| lost to NTSC IX                | 54465      | 460.5        |
| lost to additional IX by ATV   | 73511      | 172.2        |
| lost to ATV IX only            | 103975     | 464.5        |
| lost to all IX                 | 127976     | 632.7        |

## Potential Interfering Stations Included in above Scenario 1

|                                         |              |             |      |                    |
|-----------------------------------------|--------------|-------------|------|--------------------|
| 15N VI CHRISTIANSTED                    | BLCT         | 20001227ABK | LIC  |                    |
| 16N PR MAYAGUEZ                         | BPCT         | 19920102KE  | CP   |                    |
| 16A PR FAJARDO                          | BMPEDT       | 20030324ACY | CP   |                    |
| 14A PR ARECIBO                          | USERRECORD01 |             | APP  |                    |
| *Percent Service lost without proposal: |              |             | -0.4 | to DTVPLN DTVP0189 |
| *Percent Service lost with proposal:    |              |             | -0.3 | to DTVPLN DTVP0189 |

Result key: 4  
 Scenario 2 Affected station 2  
 Before Analysis

Results for: 15A PR PONCE DTVPLN DTVP0189 PLN

|                                |            |              |
|--------------------------------|------------|--------------|
| HAAT 861.0 m, ATV ERP 50.0 kW  | POPULATION | AREA (sq km) |
| within Noise Limited Contour   | 3735741    | 34733.4      |
| not affected by terrain losses | 3459968    | 33800.4      |
| lost to NTSC IX                | 54465      | 460.5        |
| lost to additional IX by ATV   | 61992      | 116.1        |
| lost to ATV IX only            | 87401      | 224.2        |
| lost to all IX                 | 116457     | 576.6        |

## Potential Interfering Stations Included in above Scenario 2

|                      |        |             |     |
|----------------------|--------|-------------|-----|
| 15N VI CHRISTIANSTED | BLCT   | 20001227ABK | LIC |
| 16N PR MAYAGUEZ      | BPCT   | 19920102KE  | CP  |
| 16A PR FAJARDO       | DTVPLN | DTVP0239    | PLN |

After Analysis

Results for: 15A PR PONCE DTVPLN DTVP0189 PLN

|                                |            |              |
|--------------------------------|------------|--------------|
| HAAT 861.0 m, ATV ERP 50.0 kW  | POPULATION | AREA (sq km) |
| within Noise Limited Contour   | 3735741    | 34733.4      |
| not affected by terrain losses | 3459968    | 33800.4      |
| lost to NTSC IX                | 54465      | 460.5        |
| lost to additional IX by ATV   | 66837      | 148.2        |
| lost to ATV IX only            | 92585      | 260.3        |
| lost to all IX                 | 121302     | 608.7        |

## Potential Interfering Stations Included in above Scenario 2

|                                         |              |             |                         |
|-----------------------------------------|--------------|-------------|-------------------------|
| 15N VI CHRISTIANSTED                    | BLCT         | 20001227ABK | LIC                     |
| 16N PR MAYAGUEZ                         | BPCT         | 19920102KE  | CP                      |
| 16A PR FAJARDO                          | DTVPLN       | DTVP0239    | PLN                     |
| 14A PR ARECIBO                          | USERRECORD01 |             | APP                     |
| *Percent Service lost without proposal: |              |             | -0.6 to DTVPLN DTVP0189 |
| *Percent Service lost with proposal:    |              |             | -0.5 to DTVPLN DTVP0189 |

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## Analysis of Interference to Affected Station 3

## Analysis of current record

|         |         |             |                      |
|---------|---------|-------------|----------------------|
| Channel | Call    | City/State  | Application Ref. No. |
| 15      | WSJN-CA | SAN JUAN PR | BLTTL -19940223IC    |

## Stations Potentially Affecting This Station

| Chan | Call    | City/State       | Dist(km) | Status | Application Ref. No. |
|------|---------|------------------|----------|--------|----------------------|
| 15   | WTIN    | PONCE PR         | 45.6     | CP MOD | BMPCDT -20040803ABE  |
| 15   | WTIN-DT | PONCE PR         | 45.6     | PLN    | DTVPLN -DTVP0189     |
| 15   | WVIF    | CHRISTIANSTED VI | 156.4    | LIC    | BLCT -20001227ABK    |
| 16   | WMTJ    | FAJARDO PR       | 39.2     | CP MOD | BMPCDT -20030324ACY  |
| 16   | WMTJ-DT | FAJARDO PR       | 39.2     | PLN    | DTVPLN -DTVP0239     |
| 16   | WOST    | MAYAGUEZ PR      | 108.1    | CP     | BPCT -19920102KE     |
| 17   | WVEO    | AGUADILLA PR     | 106.9    | CP     | BPCDT -20000501AFS   |
| 17   | WVEO-DT | AGUADILLA PR     | 106.9    | PLN    | DTVPLN -DTVP0278     |
| 19   | WKPV-DT | PONCE PR         | 65.9     | PLN    | DTVPLN -DTVP0369     |
| 19   | WKPV    | PONCE PR         | 66.0     | CP MOD | BMPCDT -20040318ABY  |
| 23   | WNJX-DT | MAYAGUEZ PR      | 88.4     | PLN    | DTVPLN -DTVP0540     |
| 23   | WNJX-TV | MAYAGUEZ PR      | 87.8     | CP MOD | BMPCDT -20040115ACG  |
| 29   | WORA-DT | MAYAGUEZ PR      | 88.4     | PLN    | DTVPLN -DTVP0763     |
| 29   | WORA-TV | MAYAGUEZ PR      | 88.4     | CP MOD | BMPCDT -20060414AAR  |
| 30   | WSJU-TV | SAN JUAN PR      | 7.9      | LIC    | BLCT -19841129LB     |
| 14   | WMEI    | ARECIBO PR       | 43.9     | APP    | USERRECORD-01        |

Proposal causes no interference

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